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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,865	10/14/2005	Eckhard Hanelt	WAS0695PUSA	9647

22045 7590 08/14/2007  
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EXAMINER
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WU, SHEAN CHIU

ART UNIT	PAPER NUMBER
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1756

MAIL DATE	DELIVERY MODE
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08/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/533,865	<b>Applicant(s)</b> HANELT ET AL.	
	<b>Examiner</b> /Shean C. Wu/	<b>Art Unit</b> 1756	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 May 2005 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/12/05</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

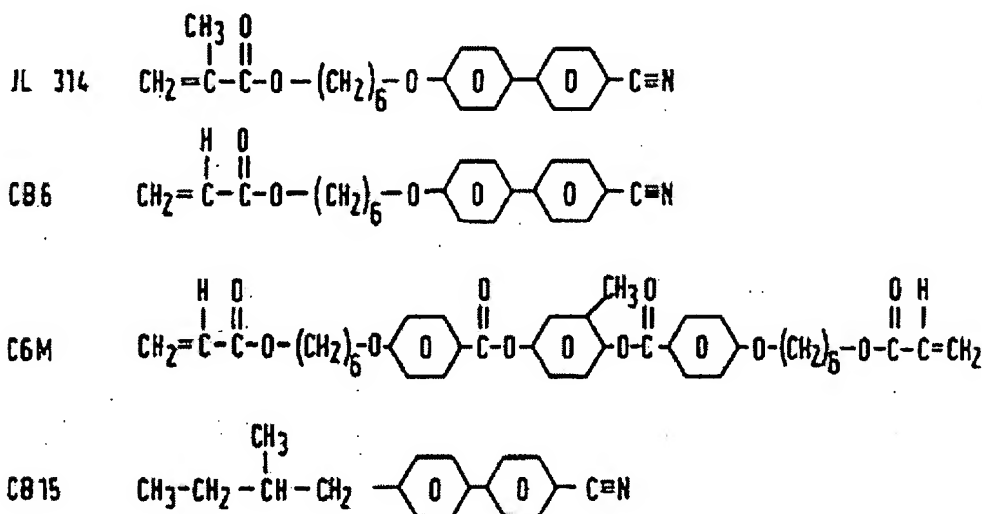
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 11-17 and 19-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Hikmet (US 5,762,823 or equivalent EP 643,121).

The reference discloses a switchable cholesteric filter comprises an optically active layer, which is situated between two substrates provided with an electrode for applying an electric field. The optically active layer contains a liquid crystalline material, which is in the cholesteric phase and comprises a three-dimensional polymer network consisting of the polymerization product of 2 wt.% of monomers containing at least two polymerizable groups and 30 wt.% of liquid crystalline monomers containing one polymerizable group, the rest of the optically active layer consisting predominantly of a mixture of chiral and/or achiral liquid crystalline molecules. The reference example a

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mixture consisting of 0.7 wt. % of the diacrylate C6M (as two polymerizable groups of the present (A)), 20 wt. % of the chiral monoacrylate 267, 4 wt. % of the non-reactive, chiral CB15 (as nonpolymerizable liquid crystal of the present (C)) and 75.3 wt. % of the non-reactive, achiral 18840 (as nonpolymerizable liquid crystal of the present (C)) was polymerized, in the presence of 1 wt. % of Igacure 651. It is noted that the monoacrylate 267 (as one polymerizable group of the present (B)) is substantially identical to CB6. Unlike CB6, monoacrylate 267 comprises an asymmetric C-atom in the aliphatic chain, which causes the compound to become chiral (see col. 5, lines 49-60; also, see lines 36-48).



The reference teaching anticipates the claimed invention.

With respect to claims 24-25, the reference mixtures described on col. 5, lines 36-60) will inherently anticipate the claimed invention because the reference mixtures comprises each ingredient of the present invention.

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4. Claims 11-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Coates et al. (US 6,218,578).

The reference discloses a polymeric film composed of an optically anisotropic material made from a crosslinked synthetic resin comprising a polymer network, is obtained by copolymerization of a mixture comprising: (a) at least 1 monomer or oligomer, each having at least 2 polymerizable functional groups selected from (meth)acrylate ester, epoxy and vinyl ether; (b) at least 1 achiral liquid crystalline (LC) monomer or oligomer, each having mesogenic groups and one polymerizable functional group as above; (c) a photoinitiator; (d) inhibitors and/or accelerators; (e) optionally at least 1 chiral component; and (f) optionally at least 1 LC mono- or dithiol compound. The chiral compound of (e) and thio compound of (f) can act as nonpolymerizable liquid crystal of the present invention. Furthermore, the reference teaches that a quantity of up to 50% by weight of a nonpolymerizable liquid-crystalline material can be added to the mixture to adjust the optical properties of the material (see col. 7, lines 64-67). The reference polymeric film shown on col. 3, item (e) reads on the present percentage of each ingredient of the present invention. The reference examples and results thereof are shown in Table 2. The reference clearly anticipates the claimed invention.

With respect to claims 24-25, the reference examples will inherently anticipate the claimed property because the reference mixtures comprise each ingredient of the present invention.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Shean C. Wu/ whose telephone number is 571-272-1393. The examiner can normally be reached on 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shean C Wu/  
Shean C Wu  
Primary Examiner  
Art Unit 1756

scw